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ABSTRACT

It is contended that verbal and nonverbal behavior are necessary components of human communication and that they should be conceived of as inseparable elements when teaching a foreign language. It is suggested that the use of gestural dictionaries currently available could serve to close the gap between old and new methods of teaching during the present transition period and until adequate communication oriented textbooks have been prepared. Findings on nonverbal communication based upon research of Canadian children whose home languages were French and English are presented. Verbal and nonverbal behavior are correlated on the level of meaning and on the level of physiology. Implications for the language teacher include the fact that training students in kinesics should facilitate the training in phonetics and in sentence intonation. Extended research is needed on second kinesics acquisition before the teaching of foreign gesticulation can begin. An illustration, two charts, and a bibliography are included. (SW)

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Total Communicative Redundancy: The Neglected Factor in Foreign Language Research

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Students of foreign language learning and teaching have examined the relationship of the source and the target language in its written and in its spoken form. Such research has been undertaken from the perspective of contrastive analysis, error analysis, and the developmental process of second language acquisition. All these studies concentrated on phonology, morphology, and syntax. Since Gleason's (1968) seminal article, occasionally some attention has been devoted to differences in discourse structures.

Paralanguage has received little or no attention in the context of foreign language teaching albeit in that area cross-cultural differences are most pronounced (Key 1975: 41-75). Sociolinguistic factors, such as differences in the speech of men and women are mentioned only when they involve clear lexical choices, as is the case in Japanese. Differences on the phonological level, as is the case in Italian, are totally neglected.

The ethnography of speaking should have fared better in the textbook treatment of foreign languages because models were readily

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available. Comparative studies in the ethnography of speaking were pioneered for American-Indian languages by anthropological linguists (Hymes 1962, Saville-Troike 1972) and applied to Black English (von Raffler-Engel and Sigelman 1971) but the subject is hardly even mentioned among foreign language teachers.

Concerning nonverbal behavior there is currently a sudden interest in this area. Until quite recently, most foreign language teachers ignored kinesics completely except for an occasional and rather joking remark. This stage, hopefully, has passed but there still is no systematic approach to the teaching of nonverbal behavior as an integral part of human communication. No foreign language textbook exists to date that correlates verbal and nonverbal behavior in the manner it obtains in natural conversation; and as it is reflected in the literature (Poyatos 1977).

The first foreign language textbook which devotes space to the discussion of gesticulation dates from 1960 (Bolinger et al. 1960: 345-347). It describes twelve Hispanic gestures. This could have been a beginning, but it was not. In the subsequent edition of that same book even that modest reference has been deleted (Bolinger et al. 1966). Eventually, however, some books came about featuring lists of gestures, all in dictionary format, charming, well illustrated, and with good narrative descriptions. The first one for Spanish appeared in 1968 (Green), a trilingual dictionary of Italian gestures was printed in 1970, and 1977 saw the Frenchman's Beaux Gestes (Wylie). All these books on foreign gestures are, of course, quite useful and

traditional
can function as an addition to the teaching of Spanish, Italian, and French. Once the student finds a certain verbal expression in his language textbook he can go to his nonverbal glossary and see whether that expression has a nonverbal counterpart and, if so, how the latter is manifested.

The absence of any textbook on foreign communication rather than on one or the other of its aspects, the verbal or the nonverbal, is shocking indeed. That the presentation of kinesics has still not gone beyond the dictionary stage is the more astonishing when one considers that the first systematic comparison of the nonverbal behavior of different groups dates as far back as 1941 (Efron 1972). Its author, David Efron, was a sociologist who compared the gestural system of immigrant groups in the United States and found that it was a function of the degree of assimilation of the individuals concerned within the broader culture of the new country. Efron's was not only the first study of the gestures of bilinguals, it was also the first study in contrastive kinesics.

This writer's interest in comparing kinesic systems began with research into the gestural behavior of lower class speakers of Black English in the United States, 1969-1970 (von Raffler-Engel 1974). Eventually, at the 1975 International Congress of Applied Linguistics, this writer (von Raffler-Engel 1976) brought the importance of contrastive kinesics to the attention of foreign language teachers by presenting the results of a research project she conducted in Canada, 1970-1971, among Canadian children whose home languages were French

and English respectively (von Raffler-Engel 1975a). The results of this research showed that French children signal their readiness for a friendly chat by leaning forward toward each other while English children convey the same message by leaning back on the chair and extending their feet in a relaxed manner.

Francophone children underscore what they say with illustrating gestures on the word level; they do this particularly with qualifiers, adjectives and adverbs. Anglophone children act out whole situations. They employ what could be termed discourse gesticulations. Given the paucity of the English gestural repertoire and the natural need of a child to move around, the children resorted to a playful representation of their stories. Once they grow up and no longer find it hard to keep still, they will undoubtedly converse in the kinesically quiet style characteristic of the proper English Canadian. They will come to know when to nod their heads and when to perform all the other forms of conventional body motions. The French children too have lots to learn. They will refine their gestural system until they have full mastery of all its expressions and of the intricate rules that govern their kinesic structure. It was clear from that study that even at grade school age an identical situation elicited different forms of bodily behavior in two different cultures.

The Canadian research did not involve more than a dozen children and did not go beyond the analysis of a limited number of experimental settings. Its importance does not lie in documenting that knowledge of the target culture's rules of kinesic behavior is essential for the

correct understanding and transmission of communication in a foreign language. What it intended to accomplish was to make specialists in bilingualism and foreign language teaching aware of the need for a structured presentation of kinesics parallel to the presentation of verbal language. To the foreign language teacher it intended to suggest work in contrastive kinesics and in error analysis. To the researcher in second language acquisition it suggested work in controlled experiments with second kinesic acquisition.

Unfortunately, nothing of this sort developed in the years following. Contrastive kinesics did not enter the foreign language textbooks. Foreign language textbook writers that were approached by this writer thought that it would make their book too bulky or would needlessly worry the students with unnecessary details. It appears that no less than those who are supposed to teach the foreign languages are unaware of the fact that a target language spoken with the body motions of the source language manifests a "foreign accent" in more ways than simply in its inadequate gesticulation. Foreign language teachers lag behind all others who concern themselves with understanding the nature of human language.

Psychiatrists have always realized that man communicates both verbally and nonverbally (Scheflen 1964,1973,1977) and that the total message lies in the combination of the two modalities. Unfortunately, most of their work is still virtually unknown to foreign language specialists.

In 1952 an anthropologist (Birdwhistell 1952) adapted the

methodology of linguistics to nonverbal behavior creating the concept of the kineme on the analogy of the phoneme. Soon thereafter, in 1954, a linguist (Pike 1957) developed the first comprehensive theory of communication correlating language, paralanguage, and kinesics. Language teachers at that time had virtually no contact with linguists. It was only in the late sixties that foreign language teachers became aware of the scientific field of linguistics but at that time the majority of American linguists followed a school of thought called transformational-generative which ignored all but the verbal language and therefore the contact was not a fruitful one. If anything, it led to doubts on the part of the language teachers about the value of a linguistic orientation in the study of language.

When body language became popular in the seventies, (Birdwhistell 1970) and the early work in kinesics reached wider audiences, foreign language teachers were not prepared to understand its impact because of their lack of training in linguistics as the science of communication. If they had any background in linguistics at all, it was in abstract theories of transformation. They were not ready to understand the coherent scheme of types and functions of facial mimicry and bodily movements which was prepared by Ekman (1965, 1975; Ekman and Friesen 1969, 1972) in the mid-sixties.

Language teachers had always had contact with psychologists, but that contact was largely restricted to specialists in learning theory. In the early seventies, they were thus not ready for Duncan's (1972, 1975) work which clarified the function of nonverbal behavior in regulating the flow of conversation between the speaker and the hearer.

Now, at the end of the seventies, the language profession seems to be at a turning point and ready for including nonverbal behavior in its research and teaching. Witness the enthusiastic reception of the latest of the gestural dictionaries, the one on French gestures (Wylie 1977). But is the profession ready to go beyond the dictionary stage? Once its practitioners include the teaching of gestures in their foreign language classes, they will realize that besides a dictionary they also need a grammar and a pedagogically valid sequence of presentation.

The first problem which will confront the writers of these new, updated foreign language textbooks will be the correlation of speech and gesture. They will have to define not only what gesture is to be produced but also when the appropriate gesture is to be used and when it is best omitted depending on the conversational style. Culture-bound value orientation in what is considered proper for verbal expression and what is best conveyed nonverbally is discussed in cross-cultural communication (Condon and Yousef 1975: 183-185). Some societies explicitly teach their children about the use of gestures. Alexandre (1972: 105) reports that in the Cameroons "The teaching of gestures is -- or was -- associated with the teaching of words."

The new textbook writers will also have to contend with variations in speech tempo. Normally, a positive correlation obtains between increase in speech tempo and increase in gesticulation. The reason for this is the need for consistent redundancy. When the risk of speaking errors and hearing misinterpretations becomes greater in the spoken medium, the gesticulatory-visual medium is intensified in order to keep

the normal ratio of 40-50% communicative redundancy at a constant level. On the micro level this is evident in any language, including English. On the macro level, one has to remember that cultures differ in their verbal language, their kinesic system, and ultimately in the relationship between the verbal and the nonverbal aspects of communicative behavior. Cultures which make use of varied and recurrent gesticulation tend to have languages spoken at a faster rate than the languages of low kinesic cultures. This is a subjective observation by this writer as no exact documentation comparing the emission rate of verbal language to nonverbal characteristics is as yet available. In a preliminary research in 1952 this writer made a syllable count per second of Italian which is empirically known as a high kinesic language and compared it with a syllable count in American English which is considered a medium-low kinesic language and discovered a temporal ratio of 3:2 in favor of Italian.

Considerations of redundancy also play a vital role in translation. Some of the means by which a speaker can convey emphasis on a particular point in his discourse are lengthening its vowels, distancing it in volume from the remainder of the text, distancing it from the preceding and following parts of the text through a sharp change in pitch, having it preceded and/or followed by a pause, and accompanying it with a gesture, expressive facial mimicry, and a change in posture, or any combination thereof, in addition to such syntactic means of placing the emphatic part in the beginning of the sentence. If volume and pause are combined for the purpose of emphasis the effect is greater than if only one of these means is adopted. If in addition

to these a gesture accompanies the verbalization, the emphasis increases in redundancy. If such redundant emphasis is translated without the gesture it loses one component and the amount of emphasis of the translation no longer corresponds to the original. In low kinesic languages there may be no gestural equivalent and it becomes thus necessary to substitute another option, by facial mimicry, or verbal means, linguistic or paralinguistic. Such substitution can be perfectly legitimate. What is necessary is the awareness that gestures and facial mimicry have a definite function in the whole message.

What ultimately structures human behavior in communicative interaction is the meaning of the message which is being exchanged. The meaning is conveyed verbally and nonverbally. The purpose of teaching a foreign language is to enable the learner to understand and express meaning in a new language, that is to communicate effectively. Communication is multi-channelled and to reduce language to the sole channel of verbalization is not communicating in full.

There is a constant interplay between the auditive and the visual modality. Given the combined function of verbal and nonverbal behavior in the speech act, a shift in modality is perfectly adequate when such is necessitated by the different distribution of the verbal and the nonverbal components in the source and in the target language. One among the few contemporary linguists who are truly sensitive to nonverbal behavior has put it in the following manner (Bolinger 1975:18): "If language is an activity, we cannot say that it stops short at the boundary of verbal speech activity, for human actions are not so easily compartmentalized. We cannot even say that it stops at the boundaries

of speech, for we are informed by our eyes as well as by our ears. And it is not always easy to tell one kind of message from the other. A person speaking on the telephone who contorts his mouth into a sneer may be heard as sneering, because the sound wave is distorted in characteristic ways; yet the hearer reacts as if he had seen the sneer rather than heard it. Audible gesture and visible gesture have many points in common."

Verbal and nonverbal behavior are not only correlated on the level of meaning. They are also correlated on the level of sheer physiology. Articulation requires a bodily motion. First, the emission of air from the lungs has to be tightly controlled for volume and possible points of stricture along its way to be exhaled from mouth and nose. This involves the whole thoracic cavity and interferes with the breathing mechanism as does any other physical exertion. The rhythm of voice articulation and the rhythm of other movements, such as a shoulder shrug, has to be coordinated. Condon and Sander (1974) observed that such self-synchrony obtains because "the quantal forms of micro-organization of a speaker's motion are isomorphic with the articulate structure of his speech." This writer (von Raffler-Engel 1975b) examined the temporal sequence of the trajectory of hand gestures in relation to the duration of the synchronous movements of the vocal apparatus and found that indeed there is a definite correlation between the two modalities. Most clearly the rhythmic coordination between the auditory and the visual expression became apparent in Bennett (1977) who described the production of a gesture analogous to the syllable, with onset, peak, and offset.

Bennett has finely mapped the verbal peaks to the kinesic peaks within the phonemic clause (see chart).

This mechanical connection between the two modalities has been recognized by popular movements like the practitioners of postropedics in Canada but it has not been given the attention it deserves either in linguistics or in language teaching. What the common physiology of vocal and verbal production implies for the linguist is that communication is even more redundant than is currently believed. What linguists have analyzed up to now is the redundancy that obtains within the levels of phonology, prosody, lexicon, syntax, and semantics, and in the combination thereof. They concluded that all human languages have an average rate of redundance of 40-50%. Paralinguistics is mentioned but has not been officially included in the redundancy count. The nonverbal component has been left out from any systematic treatment.

For the language teacher the implications are of extreme importance. Training students in kinesics should facilitate the training in phonetics and in sentence intonation. Language teachers have traditionally devoted extensive time and energy to the teaching of pronunciation while intonation contours have been neglected. Once the entire teaching of a foreign language is done from a prospective of total communication the latter will automatically become part of the teaching process.

If bilingualism is the goal of foreign language teaching, the student should be made truly bilingual, which implies that he should also become bi-kinesic. The classic example of the multi-lingual and multi-cultural individual is Fiorello Laguardia who was mayor of New York City in the forties. His gestural system has been described by

David Efron (1972:196). Mayor Laguardia was raised in a trilingual-tricultural environment. His father was of Italian descent and his mother was of Eastern European Jewish background. Laguardia himself grew up in Arizona and eventually was trained in mainstream political oratory. Having acquired English, Yiddish, and Italian in childhood, he spoke these three languages with native accent and exhibited equally native gestures in them. (See chart) Laguardia was tri-lingual, tri-cultural, and tri-kinesic. He was equally "at home" in three worlds. For a politician this was ideal. Of course, Laguardia was born into three cultures and acquired three languages in childhood. But, if foreign languages can be taught, there is no reason to believe that foreign kinesic systems are unteachable.

Once the trend will take hold which this paper is advocating of teaching verbal and nonverbal communicative behavior as joint units, the old methods of teaching the verbal language only may even be considered obsolete except for the prepararion of strictly reading texts for the short term goal of passing a PhD proficiency exam. The use of the gestural dictionaries which are currently available should serve to close the gap between the old and the new method during the present transition period and until adequate communication oriented textbooks have been prepared.

Specialists in Second Language Acquisition have dealt extensively with the problem of how a foreign language is learned and educational psychologists have researched how it is taught. Before one can begin to teach foreign gesticulation extended research is needed on Second Kinesics Acquisition. There is a certain amount of material available

on cross-cultural clashes due to the misinterpretation of bodily motions. The bibliography on that subject is extensive and ranges from the popular to the scholarly. These works are extremely useful for a general understanding of the problems that differences in kinesic styles can create. (Hoffer 1977) At the present stage, this writer believes there is need for research into the psychological basis of the perception of gestures. On the analogy of psycholinguistics this writer coined the term psychokinesics (von Raffler-Engel 1977). Little is known on how people, even within the same culture, perceive and reproduce somebody else's gestures. A series of psychological and sociological factors intervene in both the perception and the reproduction of a gestural model. (See chart) Two attempts have been made to analyze this process. The first concerned intra-cultural metakinesic behavior (von Raffler-Engel and Weinstein 1978) and the second was devoted to inter-cultural behavior.

In the latter this writer and her students (von Raffler-Engel et al. 1978) researched the translation of gestures. In their conclusion the authors suggested that Schools for Interpreters and Translators institute courses in Comparative Kinesics.

In the pilot study (von Raffler-Engel and Bucker 1977) leading to the forementioned research project, it was observed that people filter the perception of foreign gestures through their native gestural system, in a manner parallel to the perception of phonemes. Persons from low kinesic cultures do not "see" all the gestures performed by a high kinesic model. This would suggest that students in this country may have to be sensitized to kinesics before they can

actually be taught a foreign gestural system. This task should not be basically different from teaching the distinction between the French sound for i and e which American students generally do not hear as separate sounds until they are trained to do so.

In essence this paper is based on the assumption that verbal and nonverbal behavior are necessary components of human communication (von Raffler-Engel 1978) and thus should be conceived of as inseparable elements when teaching a foreign language.

Preliminary findings from an experiment which is currently conducted by this writer indicate that the amount of fatigue which is commonly associated with listening to a foreign language is considerably reduced when the listener is trained to look for nonverbal factors in addition to what he hears. Listening to a foreign language while perceiving its full communicative input in its total rather than in its reduced rate of redundancy makes listening to a foreign language more similar to listening to a native language and utilizes all the sensory channels that are intended for language comprehension. Eliminating the visual modality creates an unnatural condition which strains the auditory receptors to capacity. In this writer's opinion, adding the nonverbal factor to language teaching textbooks will help the student rather than "burden him with unnecessary details". This writer and her students sincerely hope that such old fashioned mentality can be overcome. If anything, foreign language teachers should conduct experiments to test whether indeed the inclusion of the gestural mode adds to the difficulty of learning a foreign language. This writer's findings would indicate facts to the contrary.

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Fig. 77: Major Laguardia (The Little Flower), sketched at Board of Estimate meetings and at a political rally. His general background is well enough known including his early work as interpreter for one to realize the influences of his polylingual background, his cosmopolitan environment, and his political training in oratory. His mother was a Jewess, his father an Italian musician, and his early background and schooling was in Arizona. He gesticulate frequently, using his animated face, head motion, and hands. (1) Entirely Italian in form, with a distinctly pornographic content, although I am sure it is not used as such by him; (2) a. "I resent that . . .", Italian type of gesture, chiefly because of tempo, and b. "This was the biggest snow we've had in . . .", typical American gesture – note contrast and combination; (3) "I can't do anything . . .", a rejective type of gesture, typical of both Italian and Jew, made fleetingly; (4) "These are the facts . . .", there is some Italian character in this gesture; (5) ". . . but . . .", oratorical in character, made while delivering a public speech.

David Efron, Gesture, race and culture. The Hague: Mouton, 1972.

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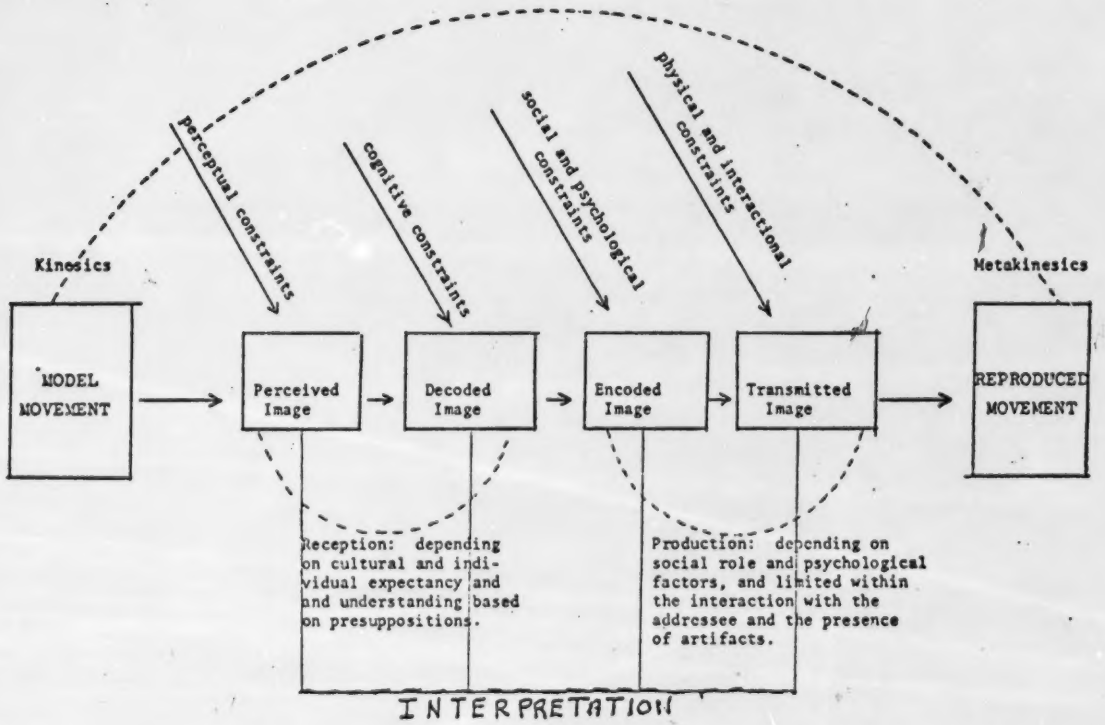
Psychokinesic chart — Walburga von Raffler-Engel (Vanderbilt University)

The Process of Metakinesic Programming


Kinesics
perceptual constraints
cognitive constraints
social and psychological constraints
physical and interactional constraints
Metakinesics
MODEL MOVEMENT
Perceived Image
Decoded Image
Encoded Image
Transmitted Image
REPRODUCED MOVEMENT
Reception: depending on cultural and individual expectancy and and understanding based on presuppositions.
Production: depending on social role and psychological factors, and limited within the interaction with the addressee and the presence of artifacts.
INTERPRETATION

from Aspects of Nonverbal Communication ed. by W. von Raffler-Engel and B. Hoffer. San Antonio, Texas: Trinity University, 1977, p. XII.

The horizontal dimension involves the time continuum with increments of one second marked off from left to right by vertical bars. Numbers at each vertical bar along the top row indicate minutes and seconds from the beginning of the interaction.

Duration:
app. $3\frac{1}{2}$ sec.

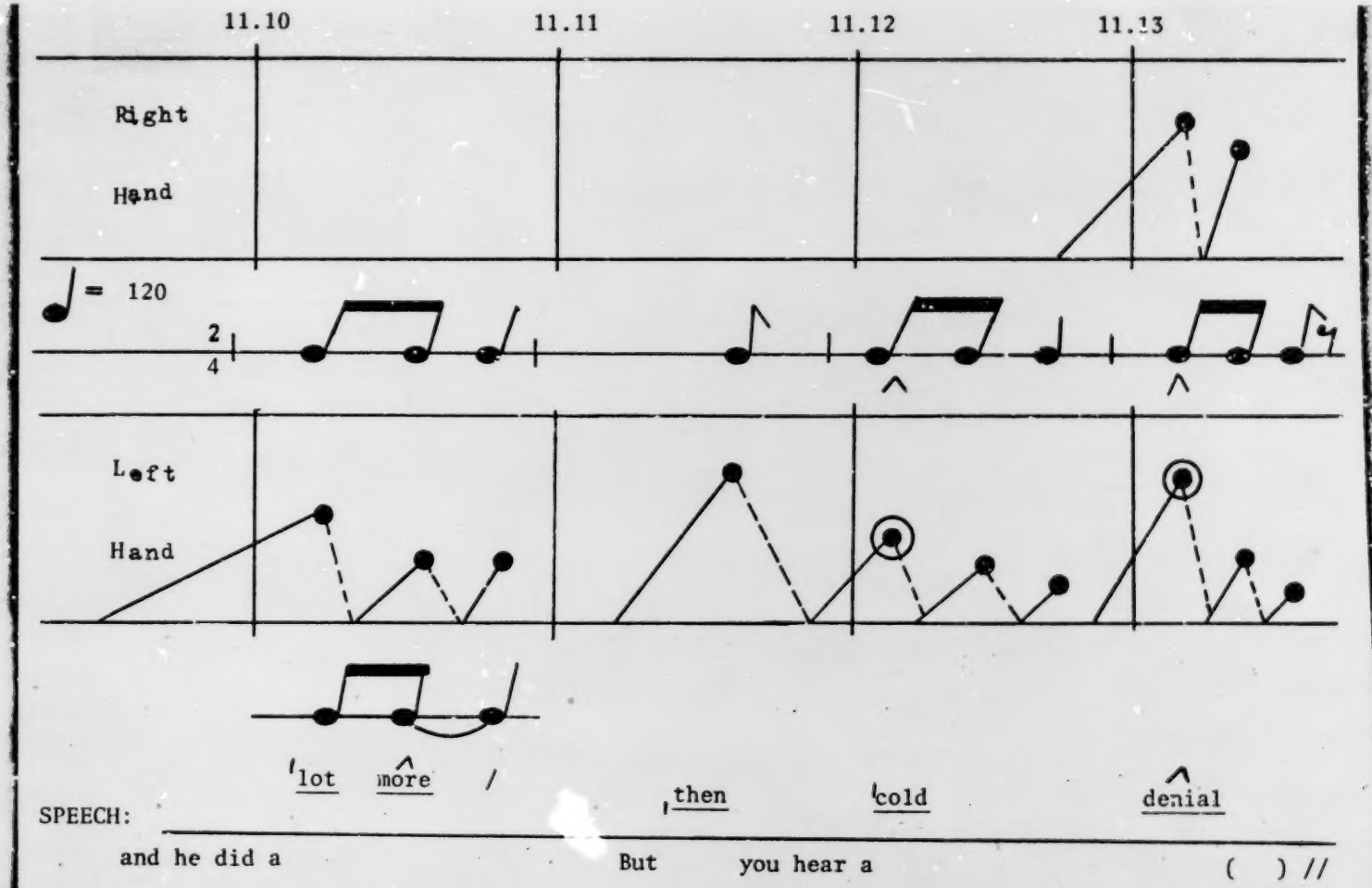


Figure 1 (Speaker: C)

Adrian T. Bennett, "Everybody got rhythm: the coordination of verbal and nonverbal channels in communication," p. 297-324 in Aspects of Nonverbal Communication, ed. by W. von Raffler-Engel and B. Hoffer. San Antonio, Texas: Trinity University, 1977, p. 309.

REFERENCES

Alexandre, Pierre 1972

An introduction to languages and language in Africa. Trans. by F. A. Leary. London, Ibadan, Nairobi: Heinemann. (Original title: Langue et langage en Afrique noire 1968.)

Bennett, Adrian T. 1977

"Everybody's got rhythm: The coordination of verbal and nonverbal channels in communication" p. 297-324 in Aspects of nonverbal communication ed. by Walburga von Raffler-Engel and Bates Hoffer. San Antonio, Texas: Trinity University.

Birdwhistell, Ray L. 1952

Introduction to kinesics (Photo-offset, Foreign Service Institute) Louisville, Ky.: University of Louisville Press (Now available in microfilm only from University Microfilms, 313 North First Street, Ann Arbor, Mich.)

_____ 1970

Kinesics and context. Philadelphia: University of Pennsylvania Press.

Bolinger, Dwight L. 1975

Aspects of language. 2nd ed. New York: Harcourt, Brace, Jovanovich.

_____, J. Donald Bowen, Agnes M. Brady, Ernest S. Haden, Lawrence Poston, Jr., and Norman P. Sacks, eds. 1960

Modern Spanish. New York: Harcourt, Brace and World.

_____, Joan E. Circuti, and Hugo H. Montero, eds. 1966

Modern Spanish. 2nd ed. New York: Harcourt, Brace and World.

Condon, John C. and Fathi Yousef 1975

An introduction to intercultural communication. Indianapolis and New York: The Bobbs-Merrill Company (Series in Speech Communication).

Condon, William S. and Louis W. Sander 1974

"Neonate movement is synchronized with adult speech: Interactional participation and language acquisition," p. 99-101 in Science, 183 (January 11).

Dictionary of Italian gestures 1970

Rome: Italy: Studio Graffeo

Duncan, Starkey, Jr. 1972

"Some signals and rules for taking speaking turns in conversation." Journal of Personality and Social Psychology, 23, 567-577.

_____ 1975

"Interaction, units during speaking turns in dyadic face-to-face conversations." (Paper presented at the Pre-Conference on Face-to-Face Interaction, IXth International Congress of Ethnological and Anthropological Sciences, University of Chicago, Ill., 1973), p. 199-213 in Organization of behavior in face-to-face interaction, ed. by Adam Kendon, Richard M. Harris, and Mary R. Key. The Hague: Mouton (World Anthropology).

Efron, David 1972

Gesture, race, and culture. The Hague: Mouton (Approaches to Semiotics 9). (Original title: Gesture an encironment. New York: King's Crown Press, 1941).

Ekman, Paul 1965

"Communication through nonverbal behavior: a source of information about an interpersonal relationship," p. 309-342 in Affect, cognition and personality, ed. by S. S. Tomkin and C. E. Izard. New York, N.Y.: Springer.

_____ and Wallace V.Friesen 1969

"The repertoire of non-verbal behavior: categories, origin, usage and coding." Semiotica, 1, 49-98.

_____ 1972

"Hand movements." Journal of Communication, XXII, 353-374.

_____ 1975

Unmasking the face. Englewood Cliffs, N.J.: Prentice Hall.

Gleason, Harold A. 1968

"Contrastive analysis in discourse structure." Report of the Nineteenth Annual Round Table Meeting on Linguistics and Language Studies, ed. by James E. Alatis. Washington, D.C.: Georgetown University Press (Monograph Series on Languages and Linguistics 21), 39-63.

Green, Jerald R. 1968

A gesture inventory for the teaching of Spanish. Philadelphia, Pa.: Chilton Books.

Hoffer, Bates and Richard Santos 1977

"Cultural clashes in kinesics," p. 325-329 in Aspects of nonverbal communication, ed. by Walburga von Raffler-Engel and Bates Hoffer. San Antonio, Texas: Trinity University.

Hymes, Dell 1962

"The ethnography of speaking," p. 13-53 in Anthropology and human behavior, ed. by T. Gladwin and W.C. Strutevant. Washington, D.C.: Anthropological Society of Washington.

Key, Mary Ritchie 1975

Paralanguage and kinesics. Metuchen, N.J.: The Scarecrow Press.

Pike, Kenneth L. 1957

Language in relation to a unified theory of the structure of human behavior. Glendale, Calif.: Summer Institute of Linguistics. (Preliminary editions published in American Anthropologist, 1954, 1955, 1959).

Poyatos, Fernando 1977

"Forms and functions of nonverbal communication in the novel: A new perspective of the author-character-reader relationship," p. 295-337 in Semiotica, 21:3/4. The idea to show how nonverbal behavior is described in the novel was first presented by Poyatos in "Paralenguaje y kinesica del personaje novelesco: nueva perspectiva en al analisi de la narracion," p. 148-170 in Revista de Occidente, 113-114 (1972).

Saville-Troike, Muriel 1972

Linguistic and attitudinal correlates in Indian education. Paper presented at AERA and at the Nashville Linguistic Circle. Unpublished ms.

Scheflen, Albert E. 1964

"The significance of posture in communication systems," p. 316-331 in Psychiatry, 27/4.

_____ 1973

Communicational structure: Analysis of a psychotherapy transaction. Bloomington, Ind.: Indiana University.

Scheflen, Albert E. 1977

"Systems in human communication," p. 3-39 in Aspects of nonverbal communication, a handbook, ed. by Walburga von Raffler-Engel and Bates Hoffer. San Antonio, Texas: Trinity University.

von Raffler-Engel, Walburga and Carol K. Sigelman 1971

"Rhythm, narration, and description in the speech of black and white school children, " p. 9-14 in The Language Sciences 18.

_____ 1974

"Language in context: Situationally conditioned style change in black English," p. 757-763 in the Proceedings of the XIth International Congress of Linguistics, Bologna, Italy, 1972, ed. by Luigi Heilman. Bologna: Il Mulino.

_____ 1975a

"Linguistic and kinesic correlates in code switching." (Paper presented at the XIIIth International Congress of Ethnological and Anthropological Sciences, Chicago, Illinois, 1973), p. 355-364 in Socialization and communication in primary groups, ed. by Thomas R. Williams. The Hague: Mouton (World Anthropology).

_____ 1975b

"The relationship of articulatory and kinesic motions in bilingual speakers." Paper presented at the Eighth International Congress of Phonetic Sciences, University of Leeds, England. (Forthcoming in Phonetica).

_____ 1976

"Some rules of socio-kinesics," p. 113-121 in Proceedings of the Fourth International Congress of Applied Linguistics, University of Stuttgart, Germany, 1975, vol. 2, ed. by Gerhard Nickel. Stuttgart, Germany: Hochschul Verlag.

_____ 1977

"Introduction," p. VII-XIII in Aspects of nonverbal communication ed. by Walburga von Raffler-Engel and Bates Hoffer. San Antonio, Texas: Trinity University.

_____ and Janis Buckner 1977

"On the translation of gestures," (Abstract)in Meeting Handbook of the Fourth ACUS Forum. Montreal, Canada: McGill University.

von Raffler-Engel, Walburga 1978

"On the structure of nonverbal behavior," p. 60-66 in Man-Environment Systems.

_____ and Steven Weinstein 1978

Metakinesic behavior in the description of nonverbal behavior. Trier, Germany: Linguistic Agency University of Trier (Series B, Paper No. 32).

_____, Amy L. Smith, Roger D. Cunningham, and Janis B. Buckner 1978

"The use of gestures in consecutive interpretation." Paper presented at the Fifth International Congress of Applied Linguistics, University of Montreal, 1978. (To appear in the Proceedings of the Fifth International Congress of Applied Linguistics, ed. by Jean Guy Savard. Quebec, Que., Canada: Laval University Press.

Wylie, Laurence and Rick Stafford 1977

Beaux gestes. New York: E.P. Dutton (The Undergraduate Press, Cambridge, Mass.).